

on the Alps of Central Europe, and, except one or two species in the Pyrenees, have no wider range. Two, three, or more of the species are often, indeed usually, associated on the same ground; yet, in spite of what has been advanced as to their crossing and presenting intermediate forms, the evidence of the clasps is quite to the contrary, especially since the species said to be mixed are those that are most distinct. But all these species are sufficiently closely allied to lead us to conclude that they have a common origin; and they therefore compel us to accept in explanation Romanes's theory of physiological isolation to account for their origin and preservation as distinct species. We have then in the grass *Erebias* a number of very similar and associated forms with very definitely distinct appendages; whilst in the other series of species, when geographical isolation has been chiefly at work, we have slightly different forms with identical appendages that compel us to regard them as one species.

We further find that many species have dark or black forms:—*glacialis*, *pluto*; *fasciata*, *magdalina*; *ncrine*, *melas*; *manto*, *cæcilia*; whilst *cæme*, *mnestra*, *epiphron*, *stygne*, and others have forms making a very close approach to these. *E. lefebvrei* has its coloured and dark forms, and *E. cæcilia* from the Pyrenees, which appears to require a fresh name, is the only dark form not correlated with a normal coloured type.

EXPLANATION OF PLATES V—XVI.‡

The figures are all sketched under the camera lucida, the amplification being 16 diameters.

Allowing for some roughness in the sketches, the general form of the processes of the tegumen and of the clasps, and the arrangement of the spines or styles are quite accurate.

The view of the clasps is usually lateral, but in some instances a more vertical aspect is given, to illustrate the form of the clasp. In a few cases the clasps are flattened by pressure, so that they look broader than they actually are. This gives, however, a more accurate single view of the form of the chitin, but many clasps do not admit of it.

The indications of the articulated base of the clasps and the open (*i. e.* unchitinised) side are sketchy and only of use as showing the angle at which the clasp is viewed; a slightly different angle alters the outline of these so much, that only with elaborate drawings could their real differences be shown.

The same remarks apply to the tegumina, some differences in the figures are due to different angles of view, and in certain cases to the preparation being in some degree under pressure; these rarely prevent a due comparison of lengths, curves, sharpnesses, &c., of the processes.

The name of a locality after the description of a figure indicates that the specimen figured was obtained at that place, after the name of a species or variety, that all the examples thereof figured were obtained there.

Where preparations have been figured from a single example, the descriptions of them are separated by commas only, where from different examples of the same species or variety, by semicolons.

PLATE V.

- Fig. 1. *E. ligea*. *a*, tegumen, *b*, clasp (Wolfsberg, Carinthia); *c*, clasp (Norway, *Elwes*). Var. *adyte*, *d*, clasp (Norway, *Elwes*). Var. *ajanensis*, *e*, clasp (Nikolaiefsk, *Elwes*), Var.—?, *f*, clasp. Var. *ajanensis*, *g* and *h*, clasps.
- „ 2. *E. euryale*. *a*, tegumen, *b* and *c*, clasps (Lölling, Carinthia.) The view of *c* is slightly from above and shows the styles not to be in one row as they appear when seen laterally). Var. *ocellaris* (Heiligenblut), *d*, clasp, *e*, tegumen, flattened from above to show the breadth of its side processes; *f*, clasp.
- „ 3. *E. cacilia*?, (Pyrenees). *a*, tegumen (the side-processes with wide ends as in Group I. *a*), *b* and *c*, clasps; *d*, clasp.
- „ 4. *E. vidleri*, *a*, tegumen, *b* and *c*, clasp (*Elwes*).

PLATE VI.

- „ 5. *E. manto*. *a*, tegumen, *b* and *c*, clasps; *d*, clasp; *e* and *f*, clasps (all from St. Anton, Arlberg); *g* and *h*, clasps (*Elwes*). Var. *pyrrhula* (Albula), *i*, tegumen, *j*, clasps; *k* and *l*, clasps.
- „ 6. *E. eriphyle*, *a*, tegumen, *b*, clasp (St. Anton); *c*, clasp (San Alpe); *d* and *e*, clasps (San Alpe); *f* and *g*, clasps (example sent as var. *pyrrhula*).

PLATE VII.

- Fig. 7. *E. epiphron*. *c*, clasp (Chamonix); *d*, clasp (Germany).
 Var. *cassiope* (Sau Alpe), *a*, tegumen, *b*, clasp, somewhat flattened. Var. *nelamus* (Campfer, Engadine), *c*, tegumen, *f*, clasp; *g*, clasp.
- „ 8. *E. pharte*. *a*, tegumen, *b*, clasp, somewhat flattened out (Kor Alp); *c*, clasps, somewhat flattened out (Col de Lauteret); *d* and *e*, clasp (Innsbrück); *f* and *g*, clasp (St. Anton). *Pharte*?, *k* and *l*, clasps (sent as var. *pyrrhula* from Switzerland).
- „ 9. *E. melampus*. *a*, tegumen, *b*, clasp (St. Anton); *c* and *d*, clasps (Lauteret). Var. *sudctica*, *e*, clasp.

PLATE VIII.

- „ 10. *E. arete* (Sau Alpe). *a*, tegumen, *b*, clasp, flattened; *c*, clasp.
- „ 11. *E. christi*. *a*, tegumen, *d* and *e*, clasps; *b* and *c*, clasps.
- „ 12. *E. kefersteini*. *a*, tegumen, *b*, clasp, *c*, clasp; *d*, clasp.
- „ 13. *E. flavofasciata*. *a*, tegumen, *b*, clasp, flattened, *c*, clasp (Engadine); *d* and *e*, clasps (Campolungo).

PLATE IX.

- „ 14. *E. ceto*. *a*, tegumen, *b* and *c*, clasps.
- „ 15. *E. maurisius*. *a*, tegumen, *b*, clasp; *c*, clasp. Var. *haberhaueri*, *d*, tegumen, *e*, clasp.
- „ 16. *E. pawlowskyi*. *a*, tegumen, *b* and *c*, clasps; *d*, clasp. Var. *ethela*, *e*, tegumen; *f* and *g*, clasps. Var. *theano*, *h*, tegumen, *j* and *k*, clasps.
- „ 17. *E. athiops*. *a*, tegumen (Innsbrück); *b* and *c*, clasps. (Innsbrück); *d*, clasp (Argyll).

PLATE X.

- „ 17. *E. athiops*, var. *melusina*, *e*, clasp. Var. *sedakovii*, *f*, tegumen, *g*, clasp. Var. *niphonica*, *h*, clasp.
- „ 18. *E. almena*. *a*, tegumen, *b*, clasp.
- „ 19. *E. maestra*. *a*, tegumen, *b*, clasp.
- „ 20. *E. gorgone*. *a*, tegumen, *b* and *c*, clasps; *d* and *e*, clasps.
- „ 21. *E. gorge*. *a*, tegumen, *b*, clasp (Innsbrück). Var. *triopes*, *c*, clasp (Tyrol).
- „ 22. *E. glacialis*. *a*, tegumen, *b* and *c*, clasps (Innsbrück).
- „ 23. *E. ottomana*. *a*, tegumen, *b*, clasp; *c* and *d*, clasps.

PLATE XI.

- Fig. 24. *E. tyndarus*. *a*, tegumen, *b* and *c*, clasps (St. Anton); *d*, clasp (Switzerland). Var. *sibirica*, *e*, clasp. Var. *callias*, *j*, tegumen; *g* and *h*, clasps; *f* and *k*, clasps.
 ,, 25. *E. epistygne*. *a*, tegumen, *b*, clasp (Digne); *c*, clasp (Grasse).
 ,, 26. *E. neoridas*. *a*, tegumen, *b*, clasp; *c*, clasp.
 ,, 27. *E. zapateri*. *a*, tegumen, *b*, clasp.
 ,, 28. *E. pronoe*. *a*, tegumen; *b* and *c*, clasps (St. Anton).

PLATE XII.

- ,, 29. *E. scipio* (Digne). *a*, tegumen, *b*, clasp; *c*, clasp.
 ,, 30. *E. lefebrei*. *a*, tegumen, *b*, clasp; *c*, clasp; *d*, clasp; *e* and *f*, clasps.
 ,, 31. *E. nerine*. *a*, tegumen (Mendel Pass); *b*, clasp (Cortina); *c*, clasp (Istria). Var. *morula*, *d*, clasp; *e*, clasp. Var. *melas*, *f*, clasp (Herculesbad); *g*, clasp (Greece); *h*, clasp (do.).
 ,, 32. *E. goante*. *a*, tegumen, *b* and *c*, clasps.

PLATE XIII.

- ,, 33. *E. stygus*. *a*, tegumen, somewhat from beneath, *b*, and *c*, clasps. Var. *pyrenaica*, *d*, clasp.
 ,, 34. *E. œme*. *a*, tegumen, *b*, clasp; *c*, clasp.
 ,, 35. *E. lappona*. *a*, tegumen, *b*, clasp (top view), *c*, clasp, (lateral view).
 ,, 36. *E. evias*. *a*, tegumen, *b*, clasp.
 ,, 37. *E. rossii*. *a*, tegumen. Var. *ero*, *b*, clasp; *c*, clasp, *d*, end of clasp more enlarged.
 ,, 38. *E. embla*. *a*, tegumen, *b*, clasp, *c*, end of clasp.
 ,, 39. *E. cyclopius*. *a*, tegumen, *b* and *c*, clasps.

PLATE XIV.

- ,, 40. *E. disa*. *a*, tegumen, *b*, clasp.
 ,, 41. *E. medusa*. *a*, tegumen, *b*, clasp (Germany); *c*, clasp (Lölling). Var. *polaris*, *d*, clasp. Var. *transiens*, *e*, clasp. Var. *hippomedusa*, *f*, clasp.
 ,, 42. *E. hewitsoni*. *a*, tegumen, *b* and *c*, clasps.
 ,, 43. *E. epipsodca*. *a*, tegumen, *b*, clasp; *c*, clasp viewed more laterally.
 ,, 44. *E. meta*, var. *yssica*. *a*, tegumen, *b* and *c*, clasps.

- Fig. 45. *E. sibo*, *a*, tegumen, *b* and *c*, clasps.
 „ „ *E. ocnus*. *d* and *e*, tegumen ; *f*, clasp ; *g*, clasp.

PLATE XV.

- „ 46. *E. kalmuka*. *a*, tegumen, *b*, clasp.
 „ 47. *E. radians*. *a*, tegumen, *b* and *c*, clasps.
 „ 48. *E. turanica*. *a*, tegumen, *b* and *c*, clasps.
 „ 49. *E. cdda*. *a*, tegumen, *b*, clasp, edge view, *c*, clasp, side view.
 „ 50. *E. tristis*. *a*, tegumen, *b* and *c*, clasps.
 „ 51. *E. dabanensis*. *a*, tegumen, *b* and *c*, clasps.
 „ 51*. *E. tundra*. *a* and *b* (somewhat foreshortened), clasp.
 „ 52. *E. discoidalis*. *a*, tegumen, *b*, clasp ; *c*, clasp, viewed at a different angle ; *d* clasp (*Elwes*).

PLATE XVI.

- „ 53. *E. fasciata*. *c*, clasp (*Mus. Brit.*). Var. *magdalena*, *a*, tegumen, *b*, clasp. Var. *erinna*, *d*, clasp.
 „ 54. *E. parmenio*. *a*, tegumen, *b*, clasp.
 „ 55. *E. afra*. *a*, tegumen, *b*, clasp, top view, *c*, clasp, side view. Var. *dalmata*, *d*, clasp.¹
 „ 56. *E. myops*. *a*, tegumen, *b*, clasp.
 „ 57. *E. maracandica*. *a*, tegumen, *b*, clasp.
 „ 58. *E. jordana*. *a*, tegumen, *b*, clasp.
 „ 59. *E. hades*. *a*, tegumen, *b*, clasp.
 „ 60. *E. herse*. *a*, tegumen, *b*, clasp.

¹ A most difficult clasp to represent satisfactorily.